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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/077,013
Filing Date: February 13, 2002
Appellant(s): STEFAN ET AL.

Frank C. Nicholas
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/16/06 appealing from the Office action mailed 02/24/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6819268	WAKAMATSU	11-2004
6249252	DUPRAY	06-2001

5627549 PARK 05-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

A. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 7-11, 15-17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakamatsu et al (US 6,819,268) in view of Dupray (US 6,249,252).

Regarding claims 1, 9, 17 and 21, Wakamatsu teaches a method of providing information to a mobile vehicle user (see Abstract and column 1, lines 23-33, see "moving body such as vehicle") comprising: receiving broadcast information at the mobile unit (column 1, lines 23-33, see "*news, weather forecast*" and they read on applicant's "*providing information*"), wherein the broadcast information comprises information location coordinate data (see column 1, lines 43-54, see "*target area information whose target area is specified may be added to the information*" and see "*postal code*", "*area name*", "*regional name*", "*prefectural and city government name*", or "*local authority name and so forth*" and it reads on Applicant's "*information location coordinate data*"), determining whether the information location coordinate data resides within an area (see column 1, lines 60-61, see "*event information such as traffic information relevant to the user's vehicle position*", and column 2, lines 25-34, see "*the current position of the vehicle", " matching the current position of the vehicle" and "the information relevant to the area corresponding to the current position of the vehicle*"), and presenting the broadcast information to the mobile user based on the determination (column 1, lines 60-61, see "*event information such as traffic information relevant to the user's vehicle position*", also see column 2, lines 25-34 and column 13, lines 36-55).

Wakamatsu does not specifically disclose the area being a convex hull.

Dupray teaches the area being a convex hull (see column 6, lines 12-15, see "*a convex hull of the verified locations*", also see column 6, lines 30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Dupray into the system of Wakamatsu so that a convex hull of the verified locations may be used as a basis for determining a new of the target mobile station (see Dupray, column 6, lines 12-15).

Regarding claim 2, Wakamatsu further teaches the broadcast information is received from a broadcast service selected from a group consisting of a radio data service, a radio broadcast data service, a satellite broadcast service, a radio broadcast service, and a wireless communications broadcast service (see column 1, lines 23-33).

Regarding claim 3, Wakamatsu further teaches the information location coordinate data comprises a longitude and a latitude associated with the broadcast information (column 9, lines 37-39, see "*the position based on latitude and longitude*").

Regarding claim 7, Wakamatsu further teaches transferring the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), rendering the broadcast information with the vehicle presentation manager (see column 1, lines 23-54 and column 2, lines 1-34), and sending the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

Regarding claim 8, Wakamatsu further teaches the presentation device is selected from a group consisting of a visual display, an audio device, and an audio-visual display device (see Abstract and column 1, lines 39-42).

Regarding claim 10, Wakamatsu further teaches the broadcast information is received from a broadcast service selected from a group consisting of a radio data

service, a radio broadcast data service, a satellite broadcast service, a radio broadcast service, and a wireless communications broadcast service (see column 1, lines 23-33).

Regarding claim 11, Wakamatsu further teaches the information location coordinate data comprises a longitude and a latitude associated with the broadcast information (column 9, lines 37-39, see "*the position based on latitude and longitude*").

Regarding claim 15, Wakamatsu further teaches computer program code to transfer the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), computer program code to render the broadcast information with the vehicle presentation manager; and computer program code to send the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

Regarding claim 16, Wakamatsu further teaches the presentation device is selected from a group consisting of a visual display, an audio device, and an audio-visual display device (see Abstract and column 1, lines 39-42).

Regarding claim 20, Wakamatsu further teaches transferring the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), means for rendering the broadcast information with the vehicle presentation manager (see column 1, lines 23-54 and column 2, lines 1-34), and means for sending the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

B. Claims 4-6, 12-14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakamatsu et al (US 6,819,268) in view of Dupray (US 6,249,252) and further in view of Park (US 5,627,549).

Regarding claim 4, the combination of Wakamatsu and Dupray teaches generating the convex hull as recited in claim 1. The combination of Wakamatsu and Dupray does not specifically disclose generating the geographic point from the recorded vehicle location coordinates.

Park teaches generating the geographic point from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu and Dupray in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claims 5 and 19, the combination of Wakamatsu and Dupray teaches the convex hull as recited in claims 1 and 17. The combination of Wakamatsu and Dupray does not specifically disclose updating the geographic point based on a coordinate input.

Park teaches updating the geographic point based on a coordinate input (see column 7, lines 12-18, see "presses the button" and it reads on applicant's "*input*" and "creates" reads on applicant's "*updating*").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of

Wakamatsu and Dupray in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 6, Wakamatsu further teaches the coordinate input is selected from a group consisting of a current vehicle location coordinate, a previous vehicle location coordinate, a recorded vehicle location coordinate input, a collection period, a collection frequency, a vehicle location coordinate retention period, a global positioning service quality indicator (see column 2, lines 1-24 and column 9, lines 37-39, see "latitude" and "longitude").

Regarding claim 12, the combination of Wakamatsu and Dupray teaches the computer program code to record a plurality of vehicle location coordinates and the convex hull as recited in claim 9. The combination of Wakamatsu and Dupray does not specifically disclose computer program code to generate the geographic point from the recorded vehicle location coordinates.

Park teaches the computer program code to generate the geographic point from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu and Dupray in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 13, the combination of Wakamatsu and Dupray teaches the convex hull as recited in claim 9. The combination of Wakamatsu and Dupray does not

specifically disclose computer program code to update the geographic point based on a coordinate input.

Park teaches computer program code to update the geographic point based on a coordinate input (see column 7, lines 12-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu and Dupray in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 14, Wakamatsu further teaches the coordinate input is selected from a group consisting of a current vehicle location coordinate, a previous vehicle location coordinate, a recorded vehicle location coordinate input, a collection period, a collection frequency, a vehicle location coordinate retention period, a global positioning service quality indicator, and a user location coordinate input (see column 2, lines 1-24 and column 9, lines 37-39, see "latitude" and "longitude").

Regarding claim 18, the combination of Wakamatsu and Dupray teaches the convex hull as recited in claim 17. The combination of Wakamatsu and Dupray does not specifically disclose recording a plurality of vehicle location coordinates; and means for generating the geographic point from the recorded vehicle location coordinates.

Park teaches recording a plurality of vehicle location coordinates (see column 7, lines 15-18), and means for generating the geographic point from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to provide the teaching of Park into the system of Wakamatsu and Dupray in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

C. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wakamatsu et al (US 6,819,268) in view of Dupray (US 6,249,252) and further in view of Stewart (US 6,546,257).

Regarding claim 22, Dupray teaches the convex hull (see Dupray, column 6, lines 12-15 and column 6, lines 30-32) is determined in response to a plurality of received and stored longitudinal and latitudinal coordinate positions from the GPS unit (see Wakamatsu, column 2, lines 25-34 and column 9, lines 37-39, see "latitude" and "longitude").

The combination of Wakamatsu and Dupray does not specifically disclose an area in which mobile vehicle user often drives.

Stewart teaches an area in which mobile vehicle user often drives (see column 2, lines 14-36 see "*repeated travel pattern*" and column 3, lines 4-8, see "*repeating the previously identified travel pattern*").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Stewart into the system of Wakamatsu and Dupray so that information is retrieved which is within a predetermined position relative to the repeated travel pattern (see Stewart, Abstract).

(10) Response to Argument

On pages 12, 13, 14, 15 and 17 of Appellant's remarks, Appellant argues that there is no motivation to combine Wakamatsu into Dupray.

In response to Appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in the references themselves so that a convex hull of the verified locations may be used as a basis for determining a new of the target mobile station (see Dupray, column 6, lines 12-15).

On pages 12 of Appellant's remarks, Appellant further argues that the references alone or in combination fail to teach determining whether the information location coordinate data resides within a convex hull as recited in claims 1, 9, 17 and 21.

In response to applicant's argument, the applicant's main argument concerns the term convex hull. The applicant argues the references in combination do not disclose the convex hull. The examiner contends the convex hull as defined in the field is defined as area with nondescript boundary, i.e., a boundary not defined by smooth curves. Therefore, not circles or square where the boundaries are straight lines. As a result, the prior art references do show the convex hull, because Wakamatsu disclose

determining when the mobile within the area, e.g., a cell of a mobile communication system. A cell of a mobile communication system theoretically is a perfect circle, however, since the cell define by the propagation electro-magnetic energy actual cells are non-perfect circles. Wakamatsu does not disclose this feature about cell. Therefore, the Dupray reference was used to show the actual cells do represent the convex hulls.

Therefore, in response to applicant's argument, the examiner contends that the combined references show every limitation of the claims include the limitation of the convex hulls.

In response, Wakamatsu teaches determining whether the information location coordinate data resides within an area (see column 2, line 1 to column 4, line 48 and column 2, lines 25-34). Wakamatsu does not specifically disclose the area being a convex hull.

Dupray teaches the area being a convex hull (see column 6, lines 12-15, see "*a convex hull of the verified locations*", also see column 6, lines 30-32).

Therefore, the combination of Wakamatsu and Dupray does indeed teach determining whether the information location coordinate data resides within a convex hull as recited in claims.

In response to applicant's argument that the examiner's basis for the alleged motivation is that: Wakamatsu so that a convex hull of the verified location may be used as a basis for determining a new of the target mobile station.

As discuss above and show in the prior art rejection the Wakamatsu's reference shows verifying the mobile in new location area and Dupray shows the location area could be a convex hull. Therefore, the examiner contends that is basis for use a convex hull to determine the location area, and it is show by the combination of the references.

On pages 16 of Appellant's remarks, Appellant further argues that the combination of Wakamatsu and Dupray does not teach "generate a convex hull as recited in claim 1".

In response to applicant's argument, as discussed above, the cited references do teach the convex hull. That is, the examiner contends the convex hull as defined in the field is defined as area with nondescript boundary, i.e., a boundary not defined by smooth curves. Therefore, not circles or square where the boundaries are straight lines. As a result, the prior art references do show the convex hull, because Wakamatsu disclose determining when the mobile within the area, e.g., a cell of a mobile communication system. A cell of a mobile communication system theoretically is a perfect circle, however, since the cell define by the propagation electro-magnetic energy actual cells are non-perfect circles. Wakamatsu does not disclose this feature about cell. Therefore, Dupray reference was used to show the actual cells do represent the convex hulls.

Therefore, response to applicant's argument, the examiner contends that the combined references show every limitation of the claims include the limitation of the convex hulls.

In response to Appellant 's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which Appellant relies (i.e., *generate a convex hull*) are not recited in the rejected claim(s) (**Claim 1**). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On pages 17 of Appellant's remarks, Appellant further argues that the Examiner's use of impermissible hindsight.

In response to Appellant 's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

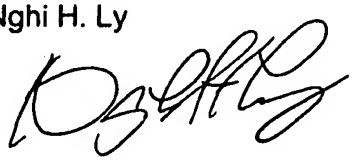
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Nghi H. Ly



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